

ABSTRACT OF THE DISCLOSURE

A memory device having one transistor and one resistant element as a storing means and a method for driving the memory device, includes an NPN-type transistor formed on a semiconductor substrate, an interlayer insulating film formed on the semiconductor substrate to cover the transistor in which a contact hole exposing a source region of the transistor is formed, a resistant material in which a bit data "0" or "1" is written connected to the source region of the transistor by a conductive plug or an insulating film, and a conductive plate contacting the resistant material. The memory device exhibits improved degree of integration, reduced current consumption by lengthening a refresh period thereof, and enjoys simplified manufacturing process due to a simple memory cell structure.